

CLAIM AMENDMENTS:

1- 6 cancelled

7. (new) A method for detecting a projected distance between a distance measuring device and an obstacle, the obstacle having a maximum height which is smaller than a height (h_s) of the distance measuring device, the obstacle also having a predetermined nearest point (P) on a surface thereof having a shortest projected distance (d) from the distance measuring device of all points of the obstacle, the method comprising the steps of:
- a) storing a projected limit distance (d_{Gr}) between the nearest point (P) of the obstacle and the distance measuring device at a limit time at which the nearest point (P) of the obstacle moves out of a detecting range of the distance measuring device, as the distance measuring device and the obstacle approach each other; and
 - b) evaluating the limit distance (d_{Gr}) and additional information concerning a relative motion between the distance measuring device and the obstacle to determine projected distances (d) between the nearest point (P) of the obstacle and the distance measuring device as long as the nearest point (P) is outside of the detecting range of the distance measuring device.
8. (new) The method of claim 7, wherein the position and the height (h_P) of the nearest point (P) of the obstacle are determined using information provided by the distance measuring device as long as

the nearest point (P) of the obstacle is within the detecting range of the distance measuring device.

9. (new) The method of claim 7, further comprising determining the distance between the nearest point (P) and the distance measuring device using information provided by the distance measuring device as long as the nearest point (P) of the obstacle is within the detecting range of the distance measuring device.
10. (new) The method of claim 7, wherein the detecting range is substantially defined by an opening angle of the distance measuring device, and the limit distance (d_{Gr}) for the obstacle, having a height (h_P) at the nearest point above ground corresponding to the maximum total height of the obstacle, is calculated according to the following formula:

$$d_{Gr} = \frac{\tan(\alpha)}{h_s - h_P}$$

wherein

h_s is a height of the distance measuring device above ground; and
 α is a portion of the opening angle of the distance measuring device below the horizontal.

11. (new) The method of claim 7, wherein the distance measuring device is installed on a vehicle.
12. (new) A computer program including program code for a distance detecting device, the program code being structured to carry out the method of claim 7.
13. (new) A distance detecting device, the device comprising:

means for detecting a distance between the distance measuring device and an obstacle in a vicinity of the distance measuring device, the obstacle having a maximum height which is smaller than a height of the distance measuring device, the obstacle also having a known nearest point which has a shortest projected distance of all points of the obstacle from the distance measuring device;

means for storing a projected limit distance between the nearest point (P) of the obstacle and the distance measuring device at a limit time at which the nearest point (P) of the obstacle moves out of a detecting range of the distance measuring device, as the distance measuring device and the obstacle approach each other;

a distance determination means for analysing distance information during relative motion between the distance measuring device and the obstacle; and

means for calculating a projected distance (d) between the nearest point of the obstacle and the distance measuring device, thereby taking into consideration a limit distance (d_{Gr}) and information provided by the distance determination means.

14. (new) The device of claim 13, wherein the device is structured for use on a vehicle.
15. (new) The device of claim 13, wherein said distance determination means acts when the nearest point (P) of the obstacle is outside of a detecting range of the distance measuring device.